

CLAIMS

We claim:

1. A method to enhance apoptosis in a cell by the administration of p53 in combination with a calpain inhibitor.
2. The method of claim 1 wherein the calpain inhibitor is calpain inhibitor 1.
3. The method of claim 2 wherein p53 is introduced to the cell via an adenoviral vector.
4. The method of claim 3 wherein said p53 sequence is under the control of the CMV promoter.
5. A method of increasing the infectivity of a cell to a viral vector by treatment of the cell with a calpain inhibitor.
6. The method of claim 5 wherein said viral vector is an adenoviral vector.
7. The method of claim 6 wherein the calpain inhibitor is calpain inhibitor 1.
8. A method of enhancing transcription of a therapeutic transgene from the CMV promoter.
9. The method of claim 8 wherein the transgene is p53.
10. The method of claim 9 wherein the transgene is encoded by an adenoviral vector.
11. A method of suppressing the *in vivo* CTL response to viral vectors by the administration of the viral vector in combination with a calpain inhibitor.
12. The method of claim 11 wherein the calpain inhibitor is calpain inhibitor 1.
13. A pharmaceutical formulation comprising a an adenoviral vector encoding p53 and a calpain inhibitor in a pharmaceutically acceptable carrier.
14. The formulation of claim 13 wherein the calpain inhibitor is calpain inhibitor 1.
15. The formulation of claim 14 further comprising a delivery enhancing agent.
16. A method of ablating neoplastic cells in a mammalian organism *in vivo* by the co-administration of a calpain inhibitor and p53.
17. The method of claim 16 wherein the calpain inhibitor is calpain inhibitor 1.
18. The method of claim 2 wherein p53 is introduced to the cell via an adenoviral vector.
19. A method of ablating neoplastic cells in a population of normal cells contaminated by said neoplastic cells *ex vivo* by the co-administration of a recombinant adenovirus encoding p53 and a calpain inhibitor to said population.
20. The method of claim 19 wherein the calpain inhibitor is calpain inhibitor 1.